



National Security Working Group

Special Report: Large Coronal Mass Ejection Heads Towards Earth

Congressman Tom Price (R-GA), RSC Chairman
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Yesterday, NASA detected a large, albeit slow-moving, coronal mass ejection (CME) leaving the front side of the sun (pictured above on left). NASA is qualifying this CME as a low-level threat. However, it is a clarion reminder of how vulnerable we are when the inevitable moment comes that a high-level threat CME hits earth. In the shadow of the upcoming solar maximum of 2012-2013, we must work tirelessly to protect our electric infrastructure against this and other electromagnetic pulse threats.¹

It is unnecessary to look back hundreds of years to find accounts of solar weather damaging electric infrastructures, as recent examples include:

- 1989 Quebec blackout
- 2003 Massive geomagnetic storm hits earth
- 2006 Solar storm disrupts space vehicle

Currently, the Senate is making provisions to bring to the floor a bill with language contained in the GRID Act (H.R. 5026), which explicitly protects the electric infrastructure. You may recall that the GRID Act passed through the House on suspension in June of this year. It now sits dormant in the Senate, with little chance of it coming to pass before the end of this Congressional session. However, a key component of the GRID Act providing for the hardening of our nation's electrical grid has caught the eye of many Senators, including Sen. Reid, Sen. Murkowski, Sen. Collins, and Sen. Bingaman as vital for national security. Should this bill pass through the Senate, it will require quick turnaround by the House if we are to pass legislation this year to harden the electric grid.

¹ http://science.nasa.gov/science-news/science-at-nasa/2006/10mar_stormwarning/

The growing integration, use of modern control mechanisms and load requirements in recent years have made our electric grid more critically vulnerable than ever before to electromagnetic pulse, whether it be man-made or natural.

The probability that such an event will occur increase daily, which makes protecting the grid an urgent matter of national security. This issue is not limited to our electric grid, but extends to protecting the lives of millions of Americans, and potentially the survival of the American way of life itself. A short list of the catastrophes resulting from an EMP on an unprotected electric grid includes:

- Loss of food and water supply;
- Loss of communication, including to our armed forces;
- Loss of virtually all things reliant on the electric grid;
- **Loss of millions of American lives.**

Therefore, it is of utmost importance that we act quickly to pass this bill through the House if it should come before us. Now is the time to protect our electric grid. To wait is to risk failing our first responsibility to protect the American people.

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